Transcoding in EAP: On the Road to Efficient Reading

By Miriam M. Rodriguez

In many Third World colleges and universities reading comprehension is recognized as the principal objective of language courses. The students need to understand and use efficiently the information contained in up-to-date sources in their respective fields of study. However, reading is just one of the basic language skills that, together with speaking, listening and writing, form an indivisible whole.

For a number of years at the University of Havana, we have been trying out different procedures to improve the language performance of our students in the context of English for Academic/Specific Purposes. Research carried out from 1985-89 has suggested the usefulness of developing listening comprehension skills (frequently neglected) to pave the way to more efficient reading comprehension. So now, in the first term here at the university, listening comprehension is emphasized, and in the following term, reading comprehension takes up the leading role.

In this reading comprehension stage, we used a variety of exercises always ending with some sort of note- taking and summarizing. Yet, not satisfied with the results, we felt that there was a missing link in the chain. In other words, we were teaching our students to comprehend the information contained in the text, but how could we determine whether they were able to use this information in a purposeful manner? Herein, I am presenting two suggestions for meeting the cognitive needs of EAP learners: One for undergraduate students of Mathematics and the other for those of Geography.

Exercise A

Locate the statement that does not correspond to the explanation and draw the corresponding diagram: A very interesting and important application of the hyperbola is that of locating the place from which a sound, as of a gun, comes from. From the difference in the times at which the sound reaches two listening posts, the difference between the distances of the posts from the gun can be determined. Then, knowing the distance between the posts, the gun is located on a branch of a hyperbola of which the posts are foci. Unlike the other conic sections, the hyperbola has associated with it two lines which are its asymptotes. The position of the gun in this curve can be found by the use of a third listening post. Either of the two posts and the third are foci of a branch of another hyperbola on which the gun is located. Hence the gun is at the intersection of the two branches.

This exercise has a double purpose: First, to develop a sense of coherence and textuality by determining the informative segment that blocks the logical connection of the excerpt; secondly,

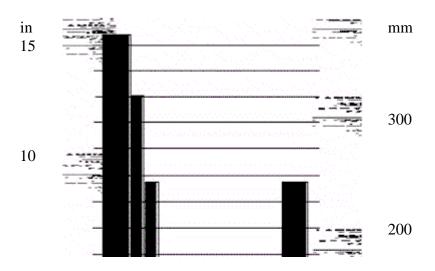
to elicit a non-linguistic response to the test on the part of the student (Grellet 1982). This second aim implies a transposition of the information; in this particular case, the information encoded verbally is decoded graphically. Thus, the information is transcoded.

Other positive features of this type of exercise are its brainstorming capacity, a high degree of background knowledge activation, and higher mental demands for its successful solution. (When using this type of exercise, an advanced student might explain the solution to his classmates, and the professor might promote a general discussion, taking advantage of the cognitive potential of this procedure.)

Exercise B

Based on the graph below, answer the following questions:

- I. Determine if the statements are True or False:
 - 1. Winter months in Darwin are extremely dry.
 - 2. Rainfall is highest in January.
 - 3. September is as dry as May in Darwin.
 - 4. There is an average rainfall of about 10" in March.
- II. Answer the following questions:
 - 1. What is the average rainfall in October?
 - 2. When is it wetter than in February?
 - 3. Is December as wet as March in Darwin?
- III. Formulate simple statements with the information contained in the graph:



Rainfall graph of Darwin, typical of the wetter parts of the summer rainfall regions.

Adapted from *A Regional Geography Part III*, by L. Dudley Stamp, Longmans, 1965.

This second exercise is also related to the transcoding of information but in reverse: The information encoded graphically is reformulated by the language user verbally. We highly appreciate its didactic value because it simulates the demands of real-life communication in the language class since geographers, in their normal professional activity, are often faced with the task of explaining and verbalizing information contained in maps, graphs, and diagrams.

In this case the exercise is structured so as to control the level of difficulty of the task presented: In (I) the student merely has to decide if the statements coincide with the information represented in the figure; in (II) s/he will have to produce the information in a controlled manner; in (III) s/he will freely produce statements within his/her verbal scope, such as "Rainfall levels are not steady throughout the year in Darwin." or "Winter is very dry in Darwin, while summer is extremely wet." Both answering questions and formulating statements are part of the professional requirements of this group of language users, thus the levels of motivation are high.

In our experience, these exercises have successfully complemented the sets of exercises originally prepared and have made the students realize that they can actually cope with the information of their specialty formulated in a foreign language. We must always bear in mind that language learning has to take into account not only the needs, but also the expectations of the language user.

Moreover, these transcoding exercises activate the comprehension process that is the cornerstone of efficient reading.

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